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Cyberhate: Profiling of Potential Targets

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Abstract

Cyberhate is defined as hatred expressed in online environments directed at groups and individuals based on their race, religious belief, ethnic origin, sexual orientation, or gender. Cyberhate is a growing phenomenon, as it coincides with increased access to the Internet. This paper explores cyberhate awareness, observations, and experiences to present a profile of cyberhate victims using the Routine Activities Theory. Providing such a profile can raise awareness of at-risk targets and provide opportunities for intervention. A survey of 183 students at a large university provided insight into online user experiences. The research revealed links between awareness, observations, and experiences of cyberhate on various online platforms. While awareness of cyberhate was associated with frequent Internet and social media access, reported experiences of cyberhate were lower than anticipated. Males experienced higher levels of cyberhate in online games and news sites. Likewise, older students experienced higher levels of cyberhate on news sites, as did respondents with higher education levels who also experienced a higher level of cyberhate on chat sites. Daily users of social media experienced higher levels of cyberhate on such platforms. An interesting finding was a correlation between frequent online gaming and lower levels of empathy for victims. The findings show the complexity of defining a profile for cyberhate targets.

Keywords: Cyberhate, Cyberbullying, Victims, Targets, Profiling, Routine Activities Theory.

Cyberhate: Profiling of Potential Targets

1. Introduction

The rapid development of accessible technologies provides new opportunities for traditional extremist activities (Vandenbosch & Van Cleemput, 2009). One opportunity provided by the Internet is the dissemination of hate speech and the spread of cyberhate related activities with few controls (Cassim, 2015). Cyberhate is the promotion of bias against a person or persons through information and communications technology (ICT). Biases leading to hate can be based on race, religion, ethnicity, sexual orientation or gender identity (Southern Poverty Law Center, 2017). While bias and associated hate are not limited to online or Internet virtual communities (Quandt, & Festl, 2017), hate promoted online can have global influence (Perry, & Olsson, 2009). Extreme forms of bias, such as cyberhate that impacts other people - referred to as targets - proliferate rapidly online (Perry, & Olsson, 2009). However, bias is not a criminal act, and even the FBI (2016), which has a broad definition of hate, can only act on the perpetration of criminal activity based on such bias.

This research set out to explore cyberhate victimization and to propose a profile of potential cyberhate targets. Providing such a profile can raise awareness of targets and provide an opportunity for educating targets and for potential technical interventions. In executing the research, data was collected from a group of South African online users. As a developing country, South Africa has many users with a limited online presence. Nevertheless, South African legislation recognizes the problem of hate speech and discrimination, making this a critical socio-technical issue.

The paper proceeds as follows; the ensuing section provides a background to cyberhate and the aim of the research. The third section describes the research approach, followed by data analysis and findings in the fourth section. Section five discusses the findings and provides a conclusion with further research recommendations.

2. Background to Cyberhate

Blaya (2019) regards cyberhate as attempts against human rights based on false rhetoric. Cyberhate targets a community, thereby threatening social cohesion and democracy. Similar to cyberhate, cyberbullying targets individuals and has manifested in online communication in various contexts since the Internet became popular in the mid-1990s (Jaishankar, 2008).

2.1 Cyberhate

Cyberhate, which thrives through limited physical contact between perpetrator and victim, is committed using ICTs, such as e-mail, cell phones, and instant messaging. Social networking sites, in particular, have provided platforms for making hateful material increasingly visible to millions of young social network sites users (Oksanen, Hawdon, Holkeri, Näsi, & Räsänen, 2014.).

In contrast to traditional bullying, which involves the threat of physical force to abuse or to intimidate others, cyberhate involves limited direct contact (Namane, 2017). The low risk of being assaulted by the target and the anonymity provided by the Internet empowers people who would not otherwise be as outspoken (Brown, 2018). Online hate can extend into everyday routines and impact how victims interact with others (Pacheco & Melhuish, 2018), which may reinforce discrimination against vulnerable groups (Oksanen et al., 2014) and

result in the victims' restriction of online activities (Pacheco & Melhuish, 2018) or even their recruitment into the perpetrator's group (Quandt & Festl, 2017). Young people are especially vulnerable as targets and may become potential recruits attracted through feelings of personal commitment, social utility or a sense of belonging provided by cyberhate perpetrators. Consequently, they may become involved as witnesses, victims or perpetrators (Blaya, 2019).

Legislatively South Africa lags America and Europe and must rely on criminal law (Cassim, 2015). However, criminal acts may be difficult to prove (FBI, 2016). The South African Promotion of Equality and Prevention of Unfair Discrimination Act 4 of 2000 includes hate speech, the prohibition of unfair discrimination on the ground of race, gender, disability, harassment and the dissemination and publication of unfair discriminatory information that unfairly discriminates. This has led to several cases perpetrated on social media going to trial.

Cyberhate involves both indirect and direct harm (Oksanen et al., 2014). Direct exposure to cyberhate can result in high levels of depression, anger, anxiety, and post-traumatic stress disorder symptoms and even to the suicide of victims. Hate speech often impacts people who share the same sentiment or identity as the victims (Fearn, 2017). Thus, cyberhate communicates societal power and may increase the marginalization of particular groups (Perry, 2002). Studies have suggested that people who share the same group characteristics as the victim may experience vicarious trauma such as a loss of self-esteem and self-worth. Fearn (2017) reveals that hate-related bias is based on either a preference for people of their own group (in-group favouritism) or negative sentiment towards people not of the same sentiment or identity as themselves (out-group bias). These biases can make groups more socially valued with out-group cyberhate provoking more fear and anger than in-group hate speech (Fearn, 2017).

While females are the predominant targets of hate speech and abusive online behaviour (Pacheco & Melhuish, 2018; Vandenbosch & Van Cleemput, 2009), cyberbullying research findings have shown that male Internet users experienced more online hate speech (Celik, 2018). There are no precise age correlations to cyberbullying with paradoxical studies showing that cyberbullying both increases with age and lessens amongst older youth (Vandenbosch & Van Cleemput, 2009).

Cyberhate requires research with rigorous evaluation protocols to counter cyberhate and evaluate strategies to overcome it (Blaya, 2019). However, cyberhate is complex and contextual and relies on multiple interpretations rendering a profile of cyberhate profile targets challenging to define.

2.2 Theoretical Basis of the Study

Theoretical frameworks on victimisation, for the most part, emphasize the role of race, religious belief, ethnic origin, sexual orientation, or gender (Wick, Nagoshi, Basham, Jordan, Kim, Nguyen, & Lehmann, 2017). Routine Activities Theory, which was developed by Cohen and Felson in 1979, shifts the emphasis to experiences in daily life where regular contact with crime relates to a higher occurrence of victimization (Wick et al., 2017). Routine Activities Theory suggests that victimization occurs at the nexus of the presence of a suitable target, a motivated perpetrator, and a lack of capable guardianship (MacKenzie, 2005; Wick et al., 2017). Routine Activities Theory has been used in several studies (e.g. Wick et al., 2017), including cyberbullying (Navarro & Jasinski, 2012). Suitability of targets, according to the Routine Activities Theory, is the degree of vulnerability posed by the potential victim. In cyberbullying, this has been linked to the types of online activities one engages in

(Navarro & Jasinski, 2012). The absence of capable guardianship is attributed to the openness and disorganised structure of the Internet. Therefore, it is essential to identify at-risk individuals by clarifying the relationship between theory and victimisation (Navarro & Jansinki, 2012).

2.3 The Current Study

Underpinned by the Routine Activities Theory, the current research sought to identify the cyberhate experiences of online users and provide a preliminary profile of a potential target, given that motivated perpetrators pre-exist and that there is limited guardianship on the Internet. The study aimed to contribute to the existing cyberhate literature from the perspective of digitally literate higher education students in South Africa. To this end, the study posed the question: What online cyberhate experiences could identify potential cyberhate targets?

3. Research Method

To answer the research question, a quantitative research approach was undertaken using a structured survey instrument developed for a similar study undertaken in Turkey and the USA by Celik (2018). The instrument included nine demographic questions including frequency of Internet access, one question on cyberhate awareness and three questions regarding observations of cyberhate. The second part of the instrument elicits responses from 42 questions about cyberhate experience using a Likert scale from one to five (never, rarely, occasionally, often and always). The original instrument was successfully applied by Celik (2018) with both Cronbach alpha and Kaiser-Meyer-Olkin ($p=0.000$) tests having values greater than 0.9.

The cross-sectional purposive sampling study took place in June 2019. Data analysis was performed using the SPSS statistical analysis package so that the level of human error was minimized. The research was governed by the guidelines of the Ethics Committee of the university in respect of the right to dignity, consent, privacy and confidentiality of the participants. Participation in this research project was voluntary, and participants could withdraw at any stage of the research process and allowed not to answer some of the questions.

Construct validity tests were done on the collected data to test whether variables for the same construct are drawn from the same pool and that the construct and concepts being studied have been correctly identified (Creswell, 2003; Cronbach & Meehl, 1955). Reliability testing to ensure consistent measurements of the data (Creswell, 2003) provided confidence that the results can be generalized, and similar results obtained if the research is conducted again. For internal consistency, the questionnaire took care not to provide leading questions. External reliability was measured using Cronbach's alpha (Creswell, 2003) which is commonly used in Information Systems studies.

4. Analysis and Findings

The survey was undertaken by 183 respondents and analyzed using SPSS version 19. Demographic measurements included gender, ethnicity, age and degree for which the respondents were registered. Female respondents ($n=110$, 60.1%) comprised the majority with males comprising 37.7% ($n=69$) and 2.2% ($n=4$) respondents who preferred not to provide their gender. The majority of the respondents were African students ($n=63$, 34.4%) closely followed by White/Caucasian students ($n=60$, 32.8%). This was followed by Coloured ($n=31$, 16.9%), Indian ($n=19$, 10.4%) and Asian ($n=3$, 1.6%) students. Most

students were below the age of 26 with 18-21 (n=83 45.4%) being dominant followed by 22-25 (n=45, 24.6%). Older respondents were aged 26-29 (n=20, 10.9%) and 30+ (n=35, 19.1%). Most of the respondents were registered for Bachelor's degrees (n=106, 57.9%) followed by Masters (n=31, 16.9%), Honours (n=23, 12.6%) and Doctoral degrees (n=17, 9.3%). Six students (3.3%) were registered for other courses.

4.1 Normality – Nonparametric Data

Normality Shapiro-Wilks tests confirmed by a Kolmogorov-Smirnov test (with Lilliefors Significance Correction) failed to reveal normality in any of the constructs. Hence, non-parametric tests were applied to the data. Correlations between variables were analysed using Bivariate Kendall's Tau-b tests, and significance tests were performed using Kruskal-Wallis H (K-Independent Samples) tests. Post-hoc Mann-Whitney U tests were performed on the significant Kruskal-Wallis H observations for within-group and between-subject tests.

4.2 Descriptive Statistics

Four aspects of online usage were analysed to identify a profile of respondents – General Internet Usage, Awareness of Possible Hate Speech, Observations of Hate Speech and Experience of Hate Speech. As shown in Table 1, 88.0% of the 183 respondents (n=161) revealed that they had experienced cyberhate on social media sites. A lower percentage (83.6%, n=153) reported having empathy for targets of cyberhate. For cyberhate awareness, ethnicity was dominant (n=149, 81.4%), followed by politics (n=141, 77.0%), religion (n=139, 76.0%) and sexuality (n=135, 73.8%). One respondent (0.5%) noted awareness of disability hate speech, and another respondent noted awareness of cyberhate based on physical appearance.

Descriptive Statistics				
	Count	%	Mean	Std. Deviation
General				
Social Media Cyberhate Experience	161	88.0%	.88	.326
Empathy towards Victims	153	83.6%	.84	.371
Awareness				
Ethnicity	149	81.4%	.81	.390
Politics	141	77.0%	.77	.422
Religion	139	76.0%	.76	.429
Sexuality	135	73.8%	.74	.441

Table 1. Descriptive Statistics – General Usage and Awareness.

Analysis of the online platforms on which hate speech was identified and on which hate speech was experienced revealed commonalities between observed and experienced hate speech as shown in Table 2. Video sites were the most observed platform for hate speech (n=114, 62.3%) and experiences of hate speech (n=94, 51.4%), followed by forums (n=90, 49.2%; n=76, 41.5%), blogs (n=66, 36.1%; n=43, 23.5%), news sites (n=47, 25.7 %; n=42, 23.0%), games (n=30, 16.4%; n=18, 9.8 %) and chat sites (n=20, 10.9%; n=17, 9.3%).

Site Platform	N	Observed		Experienced		Delta %
		Count	%	Count	%	
Video Sites	183	114	62.3%	94	51.4%	10.9%
Forums	183	90	49.2%	76	41.5%	7.7%
Blogs	183	66	36.1%	43	23.5%	12.6%
News Sites	183	47	25.7%	42	23.0%	2.7%
Games	183	30	16.4%	18	9.8%	6.6%
Chat Sites	183	20	10.9%	17	9.3%	1.6%

Table 2. Comparison of Observed Hate Speech Compared to Experienced Hate Speech.

Bivariate Kendall's Tau-b tests, shown in Table 3, were used to test the correlation between observed and experienced hate speech per online platform.

	Experienced Cyberhate					
Observed	Video	Forums	News	Blogs	Games	Chat
Video	.619** (0.00)		.183* (0.01)	.192** (0.01)	.181* (0.01)	
Forums	.170* (0.02)	.657** (0.00)	.191* (0.01)	.409** (0.00)		.212** (0.00)
News	.147* (0.05)	.165* (0.03)	.571** (0.00)	.205** (0.01)	.268** (0.00)	
Blogs	.184* (0.01)	.337** (0.00)	.267** (0.00)	.523** (0.00)	.210** (0.01)	.308** (0.00)
Games	.224** (0.00)	.196** (0.01)	.320** (0.00)	.207** (0.01)	.696** (0.00)	.214** (0.00)
Chat		.238** (0.00)		.302** (0.00)	.237** (0.00)	.672** (0.00)
Awareness	.272** (0.00)	.298** (0.00)	.287** (0.00)	.224** (0.00)	.212** (0.00)	.175* (0.01)

Table 3. Correlation between Observed and Experienced Hate Speech showing τ_b (p-value).

The Kendall's Tau-b tests showed positive correlations between observations of hate speech and experiences of hate speech for each platform, which were all statistically significant ($\tau_b > 0.500$, $p=0.000$). Chat platforms ($\tau_b > 0.672$, $p=0.000$) showed the strongest correlation which agreed with the observation of the smallest difference (1.6%). Observations of online hate on one platform in most cases correlated to experience in other platforms. This was confirmed in the frequency of observations of hate speech in general (Awareness) which showed moderate positive correlations to hate speech experienced across all measured forms of online sites. Thus entanglements exist of cyberhate observed and experienced across platforms. This was especially true for games and blogs which showed significance across all platforms.

4.3 Profile of a Cyberhate Target

The demographic data were analyzed to provide a preliminary profile of potential cyberhate targets. Three areas of cyberhate activity (Online Hate Speech Awareness, Observations of Cyberhate and Experience of Cyberhate) were analyzed using Kendall's Tau-b correlation for each demographic measure. The findings are shown in this section.

4.3.1 General

Analysis of the general demographics showed that online activity on social media strongly correlated with reading news sites ($\tau_b=0.345$, $p=0.000$) and posting to news sites ($\tau_b=0.137$, $p < 0.050$). Justifiably, levels of online activity correlated to levels of social media use ($\tau_b=0.238$, $p=0.000$) and similarly to reading news outside of social media ($\tau_b=0.171$, $p < 0.050$). Posting to news sites outside of social media strongly correlated with reading news sites ($\tau_b=0.354$, $p=0.000$). However, posting to news sites had a strong positive correlation to age ($\tau_b=0.196$, $p=0.003$) and a weak correlation to ethnicity ($\tau_b=-0.135$, $p=0.036$). This reveals that older respondents and White/Caucasian respondents were more likely to post to news sites than younger respondents and non-Caucasians. Empathy for victims of cyberhate correlated positively to social media use ($\tau_b=0.166$, $p=0.021$) as well as to gender ($\tau_b=0.220$, $p=0.003$). This finding shows that frequent users of social media and females were observed to exhibit more empathy than less frequent users and males. However, empathy correlated negatively to age ($\tau_b=-0.159$, $p=0.020$) and reading news outside of social media ($\tau_b=-0.137$, $p=0.045$). Consequently, older respondents were less sympathetic to victims as were respondents who read more online news.

4.3.2 Experience of Cyberhate

There was a negative correlation between the experience of cyberhate online games and empathy for targets of cyberhate ($\tau_b = -0.151$, $p = 0.041$). A further negative correlation between games and gender ($\tau_b = -0.186$, $p = 0.011$) showed that male gamers experienced more cyberhate than females. A positive correlation was observed between cyberhate experienced on social media, and sympathy for victims of cyberhate ($\tau_b = 0.199$, $p = 0.007$). Experience of cyberhate on news sites correlated positively to age ($\tau_b = 0.153$, $p = 0.026$) but negatively to gender ($\tau_b = -0.186$, $p = 0.011$). Thus, cyberhate was experienced on news sites by older and male respondents. There was a positive correlation between online chat cyberhate experiences and age ($\tau_b = 0.154$, $p = 0.025$) as was a correlation to education ($\tau_b = 0.235$, $p = 0.001$). Cyberhate on chat sites was experienced by older and more educated people with higher education, showing a stronger correlation than age. Although correlations between ethnicity and observations of cyberhate were identified, no correlations to experiences of cyberhate were observed.

Kendall's Tau-b analyses provided aggregated evidence of awareness, observation and experience of online cyberhate. In the next sections, in-depth analyses using Kruskal-Wallis H and Mann-Whitney U to test statistical variations between the group are reported.

4.3.3 Gender

Kruskal-Wallis H tests showed that there were statistically significant gender differences for cyberhate empathy, observed and experienced cyberhate in online games and cyberhate experiences on news sites. Kruskal-Wallis H tests showed a statistically significant difference in empathy for online cyberhate targets ($\chi^2(2) = 6.847$, $p = 0.009$) with females having a higher average mean (95.05) than males (81.95). The Kruskal-Wallis H tests showed statistically significant higher observations of cyberhate by males in online games ($\chi^2(2) = 8.037$, $p = 0.005$) as well as for the experience of cyberhate in online games ($\chi^2(2) = 5.396$, $p = 0.020$). Similarly, Kruskal-Wallis H tests showed a statistically significant difference in cyberhate experienced in online news sites ($\chi^2(2) = 6.876$, $p = 0.009$).

4.3.4 Ethnicity

Kruskal-Wallis H tests showed that there were statistically significant ethnicity differences for cyberhate empathy ($\chi^2(2) = 10.578$, $p = 0.032$), awareness of political intolerance ($\chi^2(2) = 11.622$, $p = 0.020$) and cyberhate observed in blogging sites ($\chi^2(2) = 15.712$, $p = 0.003$).

Mann-Whitney U tests were performed to determine the statistically significant differences between ethnic groups for the differences identified by the Kruskal-Wallis H tests. Empathy amongst the Coloured ethnic group was higher than the African ($U = 837.000$, $p = 0.028$), Indian ($U = 232.500$, $p = 0.008$) and White ($U = 697.500$, $p = 0.002$) ethnic groups. The Coloured ethnic group were also higher in political awareness than the Indian ($U = 205.000$, $p = 0.007$) and White ($U = 726.500$, $p = 0.015$) ethnic groups. Observation of cyberhate in blogging sites was higher for the Coloured ethnic group than African ($U = 674.000$, $p = 0.002$) and Indian ($U = 204.500$, $p = 0.034$) ethnic groups. A similar finding of the observation of cyberhate in blogging sites was higher for the White ethnic group than African ($U = 1398.000$, $p = 0.002$) and Indian ($U = 424.000$, $p = 0.049$) ethnic groups.

4.3.5 Age

Kruskal-Wallis H tests showed that there were statistically significant age differences for cyberhate in reading news sites ($\chi^2(2) = 9.062, p=0.028$), posting to news sites ($\chi^2(2) = 15.831, p=0.001$) and experiencing cyberhate on news sites ($\chi^2(2) = 8.217, p=0.042$).

Post-hoc Mann-Whitney U tests were performed to determine the statistically significant differences between age groups for the differences identified by the Kruskal-Wallis H tests. Respondents 30 years old and older were observed to read more news sites, post more to news sites and experience more cyberhate than younger respondents. Respondents 30+ read more news sites than 26-29-year-olds ($U=218.500, p=0.015$) and posted more to news sites than 22-25-year-old respondents ($U=475.000, p=0.001$). The 30+-year-old group read more than the 18-21-year-old group ($U=1017.000, p=0.007$), posted more than them ($U=887.500, p=0.000$) and experienced more cyberhate on news groups than the 18-21-year-old group ($U=1116.500, p=0.007$).

4.3.6 Education

Kruskal-Wallis H tests showed that there were statistically significant differences by level of education frequency of general observation of cyberhate ($\chi^2(2) = 10.601, p=0.014$) which was associated with being online ($\chi^2(2) = 12.056, p=0.007$) and posting to news sites ($\chi^2(2) = 12.107, p=0.007$). Statistically significant differences by education level was found for cyberhate observation on video sites ($\chi^2(2) = 8.001, p=0.046$) and cyberhate experiences on news sites ($\chi^2(2) = 8.109, p=0.044$) and chat sites ($\chi^2(2) = 17.641, p=0.001$).

Mann-Whitney U tests were performed to determine the statistically significant differences between education levels for the awareness and experienced differences identified by the Kruskal-Wallis H tests. PhD students spent more time online than the Bachelor group ($U=536.500, p=0.006$), the Honours group ($U=88.500, p=0.003$) and the Masters' group ($U=139.000, p=0.005$). Higher levels of cyberhate were observed on video sites by the Bachelor degree registered students than Honours students ($U=898.000, p=0.028$). The Master degree group had a higher frequency of observing cyberhate than the Bachelor degree students ($U=1232.500, p=0.026$) and the Honours students ($U=187.500, p=0.002$). While the Master's student group posted more on news sites than the Bachelor degree group ($U=1078.000, p=0.001$) and than the Honours students ($U=227.500, p=0.015$). They also experienced more cyberhate on chat sites than the Bachelor student group ($U=1228.000, p=0.000$). The PhD student group experienced more cyberhate on news groups than the Bachelor group ($U=647.000, p=0.010$).

4.3.7 Social Media Frequency of Use

Kruskal-Wallis H tests showed that there were statistically significant differences associated with time spent on social media platforms and empathy ($\chi^2(2) = 9.647, p=0.008$), reading news sites ($\chi^2(2) = 18.127, p=0.000$), cyberhate observed in forums ($\chi^2(2)=7.316, p=0.026$), cyberhate experienced on social media platforms ($\chi^2(2)=9.549, p=0.008$) and frequency of being online ($\chi^2(2)=8.092, p=0.017$).

Mann-Whitney U tests were performed to determine the statistically significant differences between time spent on social media groups for the differences identified by the Kruskal-Wallis H tests. Empathy was higher amongst daily users of social media sites compared to monthly users ($U=435.000, p=0.002$). However, daily users of social media also experienced higher levels of cyberhate on social media sites ($U=474.000, p=0.002$). The daily users of social media read more online news sites than monthly social media users ($U=321.000,$

p=0.003). Daily social media users read more online news sites than weekly social media users ($U=1292.500$, $p=0.001$) and observed more cyberhate in forums than weekly social media users ($U=1566.000$, $p=0.016$). While respondents who go online frequently were more likely to use social media daily than weekly ($U=1539.000$, $p=0.020$), no significance was found for monthly use of social media.

4.3.8 Online Frequency

Kruskal-Wallis H tests showed that there were statistically significant ethnicity differences for the frequency of social media use ($\chi^2(2) = 25.829$, $p=0.000$), reading of news sites ($\chi^2(2) = 19.823$, $p=0.001$), observed cyberhate in online forums ($\chi^2(2) = 12.147$, $p=0.016$), and cyberhate experienced in blogging sites ($\chi^2(2) = 11.892$, $p=0.018$).

Mann-Whitney U tests were performed to determine the statistically significant differences between online frequency groups for the differences identified by the Kruskal-Wallis H tests. The increasing frequency of being online was statistically significantly associated with higher use of social media and using online news sites. Weekly online frequency of 1 to 4 hours per week showed lower use of social media than 4 to 8 hours per week ($U=151.500$, $p=0.001$), 8 to 16 hours ($U=168.500$, $p=0.000$), 16 to 24 hours per week ($U=135.500$, $p=0.000$) and more than 24 hours per week online ($U=187.500$, $p=0.000$). A similar pattern was observed for using online news sites where the weekly online frequency of 1 to 4 hours per week showed lower use of online news sites than 4 to 8 hours per week ($U=119.000$, $p=0.000$), 8 to 16 hours ($U=138.500$, $p=0.000$), 16 to 24 hours per week ($U=125.500$, $p=0.000$) and more than 24 hours per week online ($U=159.500$, $p=0.000$). Observations of cyberhate on online forums were lower for respondents who were online for between 1 and 4 hours per week compared to the groups who went online between 8 and 16 hours per week ($U=266.500$, $p=0.044$) or more than 24 hours per week ($U=253.000$, $p=0.004$). Users with an online frequency above 24 hours per week were more likely to observe cyberhate on online forums than frequencies of 4 to 8 hours per week.

Cyberhate experiences in online blogs were statistically significantly higher for an online frequency of 1 to 4 hours per week compared to 16 to 24 hours. However online frequencies of more than 24 hours per week showed statistically significantly higher observations of cyberhate on online blogs than the online frequency of 4 to 8 hours per week ($U=692.500$, $p=0.039$), 8 to 16 hours per week ($U=882.000$, $p=0.035$) and 16 to 24 hours per week ($U=673.500$, $p=0.005$).

5. Discussion and Conclusion

This paper set out to explore a profile of cyberhate victims. Providing such a profile could raise awareness of targets who may be at risk. This is important given the limited recourse to cyberhate until a punishable crime is identified. A survey completed by 183 participants provided insight into cyberhate experiences from which a preliminary profile can be built. The research revealed links between awareness and observations of cyberhate in various online platforms – social networking, video sites, forums, news sites, blogs, games and chat sites – and experiences of cyberhate. Observations per platform correlated strongly to experience on the same platforms and moderately on other platforms. Thus awareness, observations and experiences of cyberhate were not restricted to any one type of social media.

5.1 Summary of Findings

The findings resonate with Wick et al. (2017), in the view that most cyberhate research focuses on the roles of the victim's attributes, such as age and gender. The findings showed that awareness of cyberhate permeated the online environment. As can be expected, people who were frequently online often frequented social media sites. Frequent use of social media sites correlated to a statistically significant reading of news sites. Interestingly, chat sites revealed higher correlations of cyberhate experiences for older and more educated respondents. Males experienced higher levels of cyberhate on news sites where higher levels of use correlated to lower levels of empathy for victims of cyberhate. On the other hand, higher use of social media correlated to higher levels of empathy. Thus, a potential paradox exists in the effect of social media and news sites on empathy. Empathy was lower for increased age, although it correlated most strongly to females. In contrast, online games correlated strongly to lower empathy for cyberhate victims. However, this may be due to a stronger correlation between online games and males. Analysis of ethnicity showed that Coloured students showed more empathy than other groups, while no significant empathy differences between African and White students were observed. Although observation of cyberhate in blogs was significantly higher for White students, there were no statistically significant differences between ethnic groups for the experience of cyberhate. Older students were observed to read and post more to news sites and experience more cyberhate on the news sites. Senior students experienced higher levels of cyberhate on newsgroups while Masters students experienced more cyberhate on chat sites. Analysis of social media use showed more empathy amongst daily users of social media compared to monthly users. Daily Internet users experienced higher levels of cyberhate on social media and higher frequency of going online correlated to a higher experience of cyberhate on blogs.

5.2 Towards a Cyberhate Target Profile Based on the Experiences of Cyberhate

Following the Routine Activities Theory, cyber-victimisation can be identified through the experiences of users of technology (Wick et al., 2017). Consequently, this study analysed the cyberhate experiences of respondents to develop a preliminary target profile. Frequent Internet and social media access showed more awareness, observation and experience of cyberhate. Although awareness of cyberhate was statistically significant and observations of cyberhate were frequent, there was lower than anticipated findings of cyberhate experiences. No statistically significant evidence was observed for the experience of cyberhate by ethnic groups. Males experienced higher levels of cyberhate in online games and news sites. Older students also experienced more cyberhate on news sites, as did respondents with higher education levels. Higher education levels experienced higher levels of cyberhate on chat sites. Daily users of social media experienced higher levels of cyberhate on social media sites while high online frequency correlated to a high level of experience of cyberhate on blogs. Paradoxically, low online frequency correlated to higher cyberhate experiences on blogs than medium online frequency.

	Video	Social Media	Forums	News	Blogs	Games	Chat
Daily online					✗		
Social Media Frequency		✗					
Ethnicity							
Males				✗		✗	
Older				✗			
Higher Education				✗			✗

Table 5. Profile of a Cyberhate Target.

The preliminary profile of a cyberhate target, as shown in Table 5, revealed that cyberhate experienced in blogs correlated closely to being online daily. Plausibly, higher social media use is associated with higher levels of cyberhate experienced on social media. However, there were no significant findings of cyberhate experienced on social media and frequent general online activities. There were also no significant correlations between ethnicity and cyberhate. Males were found to experience more cyberhate in online gaming and news sites. Likewise, older students and higher education level students experienced cyberhate in news sites. Higher educated also experienced cyberhate in chat rooms.

The preliminary profile and research findings show the complexity of defining a profile for cyberhate targets. This profile provides a starting point to identify at-risk individuals. For example, an older, higher educated male is most likely to experience cyberhate on news sites but is statistically less likely to experience cyberhate in forums.

5.3 Conclusion

The findings are broadly in line with the reviewed literature and the findings of authors such as Blaya (2019) who suggest more research is required for cyberhate target profiling. An underexplored area observed in the current research was the impact of cyberhate on the online gaming community. The current study showed statistically significant observations of cyberhate in online gaming with an associated lowering of empathy for cyberhate victims, which indicates an interesting area for future research. Across platforms observations of cyberhate exceeded experienced cyberhate. The difference between experienced and observed hate speech per platform appeared to increase with increasing distance between the perpetrator and the target. Distance related to combinations of time and space. For example, chat sites (delta = 1.6%), and news sites (delta = 2.7%) typically are associated with closer proximity in time, whereas blogs (delta = 12.6%) are accessed frequently over extended periods. Supposedly more static media, such as video sites (delta = 10.9%), was similar to blogs, presumably due to recommendation algorithms. Further research may provide insight into these findings.

Limitations for the research derives from the use of low sample size and a single case study at a prominent South African University with high levels of digital literacy skills. A larger sample and other contextual settings may result in variations on these findings.

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